

Special Issue

Advancement in Computational Fluid Mechanics and Optimization Methods

Message from the Guest Editors

Computational fluid dynamics (CFD) is currently one of the most advanced and still-developing engineering tools. Transient flows around an airfoil at a large angle of attack, and complex flows in rotating machines are still a challenge for this approach. An interesting issue is combining CFD with the dynamics of construction. It can be used for the dynamics of both a rigid and deformable body. Knowing that CFD tools are getting better and better at being able to calculate the flow around an airplane or turbine in moderate angles, this makes an excellent opportunity for optimizing the shape of the wing, as well as the flight trajectory of the object. This Special Issue on “Advancement in Computational Fluid Mechanics and Optimization Methods” focuses on the following issues:

- CFD fundamentals
- The use of CFD in renewable energy sources
- Dynamic stall
- Modeling of turbulence
- CFD applications in aeroelasticity
- Control and optimization methods

Guest Editors

Dr. Krzysztof Rogowski

Institute of Aeronautics and Applied Mechanics (IAAM), Warsaw
University of Technology, 00665 Warsaw, Poland

Dr. Piotr Lichota

Division of Mechanics, Institute of Aeronautics and Applied Mechanics,
Faculty of Power and Aeronautical Engineering, Warsaw University of
Technology, 00-665 Warsaw, Poland

Deadline for manuscript submissions

closed (31 January 2021)



Processes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5



mdpi.com/si/38649

Processes
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
processes@mdpi.com

[mdpi.com/journal/
processes](https://mdpi.com/journal/processes)





Processes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5



[mdpi.com/journal/
processes](https://mdpi.com/journal/processes)



About the Journal

Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Giancarlo Cravotto

Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, AGRIS, and other databases.

Journal Rank:

CiteScore - Q2 (Chemical Engineering (miscellaneous))